COMPUGEN LTD
Form 6-K
March 02, 2004

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Report of Foreign Private Issuer

Pursuant to rule 13a-16 or 15d-16 of the Securities Exchange Act of 1934

for the month of February 2004

Compugen Ltd.

(Translation of registrant's name in English)

72 Pinchas Rosen Street, Tel-Aviv 69512, Israel

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual

reports under cover Form 20-F or Form 40-F.

Form 20-F X Form 40-F ___

On February 4, 2004 Compugen Ltd. (the "Registrant") issued a Press Release, filed as Exhibit 1 to this Report on Form 6-K, which is hereby incorporated by reference herein.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Compugen Ltd.

(Registrant)

By: /s/ Mor Amitai

Name: Mor Amitai

Title: President & CEO

Date: March 2, 2004

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Exhibit 1

Compugen Discovers Novel Soluble CD40 Protein

- Company CEO describes discovery engine capability at R&D Leaders` Forum -

Coral Gables, FL - March 1, 2004 - Speaking at the R&D Leaders` Forum today, Mor Amitai, Ph.D., President and Chief Executive Officer of Compugen Ltd. (NASDAQ: CGEN), disclosed that one of the novel potential therapeutic proteins Compugen had predicted and is now included in its initial pipeline is a soluble splice variant of CD40, a member of the tumor necrosis factor (TNF) receptor family with potential applications in the treatment of autoimmune diseases, cancer, organ transplantation, and inflammation.

The novel CD40 protein was disclosed as an example of the power of the Company`s iterative discovery process, utilizing discovery engines combining predictive mathematical modeling with hypothesis-driven experimentation. This unique discovery capability, developed by Compugen over the past decade, was the primary subject of Dr. Amitai`s presentation at the R&D Leaders` Forum. In his talk, Dr. Amitai demonstrated how, through the use of this capability, Compugen obtains deeper understandings of important biological phenomena such as alternative splicing and endogenous antisense. These understandings, when integrated into the predictive models, allow the continuing identification of putative drug targets, therapeutic proteins, and biomarkers that would have been difficult to discover utilizing conventional experimental techniques. Furthermore, because of this predictive method of discovery, Compugen believes these discoveries will, in general, prove to have a higher probability for successful development.

CD40 and its ligand, CD154, are involved in a pathway which leads to maturation and stimulation of cells in the immune system. Blocking this pathway has been shown to effectively prevent rejection in organ transplantation and treat a variety of autoimmune diseases. Compugen`s novel protein, CGEN-40, is naturally occurring, and, unlike the known CD40, which is a membrane bound protein, is soluble. In general, soluble proteins offer substantial advantages for development as therapeutics compared to cell membrane bound or intracellular proteins. The predicted activity of CGEN-40 is being validated by Compugen using binding and activity assays. These assays have demonstrated the ability of CGEN-40 to compete with CD40 for binding to CD154.

CGEN-40 and other potential therapeutic proteins now in Compugen`s initial pipeline are scheduled to enter further validation studies in the coming months, and the Company intends to add six additional potential therapeutic proteins to its pipeline during 2004. Compugen has filed patents on many of the splice variants that it has discovered, such as CGEN-40, and has already been allowed patents on some of these.

About Compugen

Compugen, a genomics-based drug and diagnostic discovery company, increases the probability of successful development of novel drug and diagnostic products by incorporating ideas and methods from mathematics, computer science, and physics into the disciplines of biology, organic chemistry, and medicine. This unique capability results in powerful predictive models and discovery engines, which are both advancing the understanding of important biological phenomena and enabling the discovery of numerous potential therapeutic products and diagnostic markers. The Company has an early stage in-house pipeline consisting of selected therapeutic protein candidates discovered by the Company; additional discoveries have been out-licensed for development. Among Compugen`s customers and partners are leading pharmaceutical and diagnostic companies, such as Abbott Laboratories, Diagnostic Products Corporation, Novartis, and Pfizer. For additional information, please visit Compugen's updated corporate Website at www.cgen.com.

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements include words like "may," "expects," "believes," and "intends," and describe opinions about future events. These forward-looking statements involve known and unknown risks and uncertainties that may cause the actual results, performance or achievements of Compugen to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Some of these risks are: changes in relationships with collaborators; the impact of competitive products and technological changes; risks relating to the development of new products; the ability to implement technological improvements; the ability of Compugen to obtain and retain customers. These and other factors are identified and more fully explained under the heading "Risk Factors" in Compugen's annual reports filed on form 20F that are filed with the Securities and Exchange Commission.

NOTES FOR EDITORS

Discovery Engines

Compugen's discovery engines have been designed to enable researchers to accurately identify proteins with desired properties which render them suitable for therapeutic and diagnostic development. These engines incorporate both proprietary Compugen information and information from various external sources. One of these engines, the therapeutic protein variant engine, identifies novel splice variants of proteins that are known to have a therapeutic utility by combining knowledge arising from the Company`s unique transcriptome model with information about therapeutic proteins that are now in the marketplace or in development by others. This engine also enables the selection of proteins based on properties such as the existence of a signal peptide, tissue distribution, and various functional domains.

The therapeutic protein variant engine, like other Compugen protein discovery engines, incorporates LEADS, the Company`s computational biology platform, which creates a comprehensive view of predicted genes, mRNA transcripts, splice variants, and proteins, along with detailed functional annotations. LEADS accurately models many complex biological phenomena and provides a comprehensive research infrastructure, facilitating the development of drug targets and other biological products. The discovery engines extend the capabilities of the LEADS platform by incorporating sophisticated search algorithms to select the most promising therapeutic proteins and diagnostic markers from the myriad of proteins identified by the Company`s technology.

In addition to the LEADS process results, the input to Compugen`s therapeutic discovery engine includes biological and medical knowledge and additional relevant data types analyzed by both software and automated processes, and manual analysis by Compugen`s scientists and consulting experts. The computational components of the engine are constantly updated and improved as additional knowledge is gained from the engine or from other Compugen or third party research. Thus, this engine is designed to provide scientists with an ever-increasing capability to discover druggable proteins with desired properties, for example, secreted variants of membrane proteins - such as CGEN40 - whose interactions with their ligands have proven medical effects. Such secreted forms may function as natural blockers against the ligand.

The most significant advantage of Compugen`s discovery engines is the direct participation of Compugen`s mathematicians, in the biological work, and of the wet biologists in the algorithm and predictive model design. In addition to substantially increasing the quality and usefulness of the results, this shortens the time it takes to modify and improve the process.

Currently Compugen is focusing its efforts in utilizing its discovery engines to extract potential therapeutic proteins and diagnostic markers. However, this approach has been designed to be equally useful for the discovery and selection of validated targets for small molecules, antibodies and other types of drugs.